ABSTRACT OF THE DISCLOSURE

A semiconductor device according to the present invention includes a first semiconductor chip having a semiconductor substrate area and a transistor forming area, at least one first electrode formed on the periphery of the semiconductor substrate area, at least one second electrode formed on the periphery of the transistor forming area, a second semiconductor chip mounted on the semiconductor substrate area of the first semiconductor chip, at least one third electrode formed on the second semiconductor chip, a plurality of leads disposed around the first semiconductor chip, at least one first metal wire which connects the first electrode of the first semiconductor chip and the third electrode of the second semiconductor chip, at least one second metal wire which connects the second electrode of the first semiconductor chip and each of the leads, and an encapsulating resin for sealing the first and second semiconductor chips, the first and second metal wires and some of the leads.